

Terms of Reference (ToR)

Position Title: Project Management Specialist / Planning Engineer

Project: Karachi Water and Sanitation Services Improvement Project (KWSSIP)

Location: Karachi, Pakistan

Reporting to: Deputy Project Director, Operations

1. Introduction

KWSSIP-2 is a large, complex, and high-risk program requiring robust delivery controls. A Primavera P6 **Integrated Master Schedule (IMS)** has been established and must be transformed from a static baseline into a **living management tool** that integrates procurement, contracts, environmental and social (E&S) prerequisites, and financial baseline governance into a unified monthly monitoring cycle.

The PIU requires a dedicated Planning Engineer / IMS Specialist to maintain the integrity of the Primavera P6 master file, run a disciplined monthly update process, produce critical path and schedule health insights, and ensure traceable baseline and change control practices.

2. Objective of the assignment

The objective of this assignment is to operate and maintain the Primavera P6 Integrated Master Schedule (IMS) for KWSSIP-2 as the PIU's primary schedule governance and program controls instrument, ensuring that schedule logic, baselines, and progress measurement are consistently updated and defensible for management oversight and financier supervision.

3. Scope of Work

A. Integrated Master Schedule (IMS) Governance and Schedule Architecture

- Maintain the Integrated Master Schedule as the authoritative program-level schedule for KWSSIP.
- Maintain and refine the Work Breakdown Structure (WBS) and standard activity categorizations (e.g., design, procurement, construction, communications, Environmental and social) to enable aggregation, filtering, and cross-component analysis.
- Ensure schedule structure supports clear accountability and segregation of duties across the PIU, KWSC, consultants, and contractors.
- Integrate environmental and social safeguard requirements as well as communications milestones into IMS logic as mandatory predecessor milestones to procurement, contract award, and site mobilization actions.
- Maintain the approved baseline schedule as a fixed reference benchmark.

B. Baseline Management and Change Control, including Monthly Schedule Update Cycle

- Maintain auditable records of assumptions, constraints, and approvals within Primavera P6 documentation tools.
- Establish and manage a disciplined monthly IMS update process, integrating verified inputs from contractors, supervision consultants, contract managers, procurement

teams, and institutional reform units and documenting the rationale/approval process for changes

- Enforce Primavera P6 update protocols, including:
 - Advancement of the Data Date (Status Date);
 - Entry of actual start and finish dates;
 - Updating remaining durations and progress;
 - Recalculation of schedule logic to generate updated completion forecasts.
- Identify and flag data quality issues such as out-of-sequence activities, unrealistic progress reporting, or logic inconsistencies.

C. Progress Measurement and Rules of Credit

- Configure and maintain appropriate progress measurement methods (“Rules of Credit”) in Primavera P6, including WBS milestones, 0/100, 50/50, activity percent complete, and physical percent complete techniques.
- Apply physical percent complete and weighted Activity Steps where necessary to ensure credible progress reporting for civil works and complex activities.

D. Critical Path, Dependencies, and Schedule Health

- Conduct regular critical path and near-critical path analyses to identify schedule risks and bottlenecks.
- Model and monitor key external and internal interdependencies using IMS milestones, including those beyond the direct control of the PIU.
- Monitor float consumption and overall schedule health, highlighting emerging risks to PIU leadership with recommended mitigation actions.

G. Linkages to Finance and results Monitoring and Evaluation (M&E)

- Support the integration of the IMS with financial planning and budgeting tools used within Primavera P6 (e.g., time-phased planning and spending plan views), in coordination with the Manager Finance
- Support the real-time integration of the IMS with results tracking and forecasting tools either within Primavera P6 or in a separate Management Information System in coordination with the M&E specialist
- Produce schedule outputs that assist PIU leadership and finance staff in assessing planned versus actual implementation progress.

Deliverables

- IMS Operating Protocols: Monthly update calendar, Data Date procedures, and schedule input templates.
- Monthly IMS Update Package: Updated Primavera P6 file, critical path and variance analysis, and schedule health notes, and expenditure forecasts
- Look-Ahead Reports: Short-term (e.g., 90-day) look-ahead schedules and milestone forecasts.

- Dependency and Risk Notes: Periodic documentation of key schedule dependencies and emerging risks.
- Baseline and Change Control Records: Documentation supporting approved changes to the schedule.
- Inputs to the KWSSIP Annual Work Plan and Budget and the variance analysis for the previous year's Annual Work Plan and Budget.

4. Qualifications and Experience

Required Qualifications

- Bachelor's or Master's degree in Project Management, Engineering, Information Systems, or a related field.
- Minimum of 7 years of experience in project management, preferably in infrastructure or donor-funded projects.

Technical Skills

- Proficiency in **Primavera**, **MS Project**, and **Master Schedule** or similar project management platforms.
- Strong analytical and reporting skills.

Competencies

- Attention to detail and ability to manage complex datasets.
- Strong communication and coordination skills.
- Ability to work under pressure and meet tight deadlines.
- Familiarity with donor-funded project environments, especially World Bank and AIIB.

5. Reporting Line

- The Planning Engineer / IMS Specialist will report to the Deputy Project Director, Operations.

6. Contract Duration:

The Specialist is required to work for the KWSSIP-2 for the period of Three (03) years. The Probation Period will be for 3 months; Contract can be terminated with one month notice period by either party. The position is based in Karachi with travel requirements to the site as & when required.

7. Salary and Benefit:

Market competitive salary (lump-sum with no other benefits) based on qualification and experience will be offered.

8. Selection Process:

An individual will be selected in accordance with process stipulated in Section VII of "Approved Selection Methods: Consulting Services, Clause 7.34, Approved Selection Methods for Individual Consultants under The World Bank Procurement Regulations for IPF Borrowers (Fifth Edition September 2023).